

Do Not Discard or Destroy



# Office of the City Auditor

CITY OF SCOTTSDALE  
CITY PARCEL DATABASE  
DECEMBER 1992  
(Report No. 8902.1A)

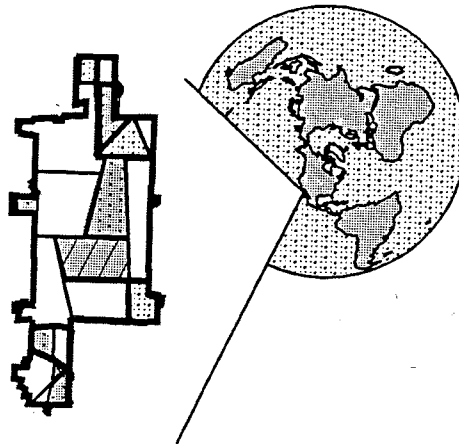
Michael L. Ashcraft  
*City Auditor*

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***SCOTTSDALE CITY COUNCIL***

Herbert Drinkwater, Mayor  
Councilman Greg Bielli  
Councilman James Burke  
Councilman Sam Campana  
Councilman Mary Manross  
Councilman Bill Soderquist  
Councilman Richard Thomas



**CITY OF SCOTTSDALE  
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DECEMBER 1992  
(Report No. 8902.1A)**

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# CITY PARCEL DATABASE ACTION PLAN

No.	RELATED DISCUSSION (Page No.)	MANAGEMENT RESPONSE		IMPLEMENTATION STATUS		RECOMMENDATION(S) (Potential Financial Impact Summary)
		AGREE	DISAGREE	UNDERWAY	PLANNED	
1	4	X			X	The Financial Services General Manager should designate a City parcel database focal point responsible for making sure the database is adequately secured, maintained and updated. (Cost: nominal. Benefit: continued database utility.) [Priority 3]*
2	4	X		X		The City Attorney should determine whether or not the City can take steps to recover revenue lost in past tax years due to County Assessor error. (Cost: undetermined, but could be substantial. Benefit: potential recovery of tax revenue.) [Priority 2]*
3	5	X		X		The Financial Services General Manager should continue to periodically verify that the city property tax roll is accurate and complete, that new construction has been valued and placed on the roll within statutory time limits, and that property valuation is updated yearly. (Cost: nominal after start-up cost. Benefit: potential recovery of tax revenue.) [Priority 2]*
4	5	X			X	The Development Services Director should determine whether or not City building permits can be valued using appraisal profession standards as a means of enhancing City property valuation monitoring. (Cost: under \$1,000. Benefit: enhanced valuation monitoring.) [Priority 3]*
5	5	X		X		The Development Services Director should develop and implement procedures to accurately maintain Geographic Information System parcel data. (Cost: nominal. Benefit: continual database utility.) [Priority 2]*

- \* Priority classifications: [1] Fraudulent practices or other serious violations are being or have been committed resulting in significant financial or equivalent non-financial losses to the City.  
 [2] The potential for incurring significant financial or equivalent non-financial losses exists, or significant revenue could be generated or recovered.  
 [3] Administration, operations, or programs can be improved, or statutory noncompliance exists.

**EXECUTIVE SUMMARY**

December 23, 1992

To the Most Honorable Herbert R. Drinkwater, Mayor  
and the Members of the Scottsdale City Council

A City audit, "Progress Since 1989 In Property Tax Management," (October 1992) found continuing problems with accuracy of the property roll maintained by the County Assessor. About half of the roll errors referred to the Assessor for correction in a 1989 audit were fixed. But when the 1991 roll was verified to develop a parcel database useful for the new City Geographic Information System (GIS), new errors were found.

When the Assessor corrects these errors, the City should realize an additional \$2.5 million full cash assessed valuation, with tax revenues of an estimated additional \$28,000 annually. Taken together with roll corrections from earlier audits, the City should gain a total \$9.7 million valuation, with annual revenues of almost \$80,000. (See Insert.)

<i>Estimated Audit Effort Revenue Results From Roll Corrections</i>		
<i>Year</i>	<i>Valuation</i>	<i>Annual Revenue</i>
<i>This Project</i>	<i>\$2,502,144</i>	<i>\$28,307</i>
<i>1992 Follow-up</i>	<i>\$1,885,145</i>	<i>\$10,093</i>
<i>1989 Report</i>	<i>\$5,318,255</i>	<i>\$41,424</i>
<i>Total</i>	<i>\$9,705,544</i>	<i>\$79,824</i>
<i>Source: Audit Analysis</i>		

Meantime, property valuation appeals continue to reduce city valuation. The Assessor determined that for 98 parcels requiring correction identified by audit, valuation from 1991 to 1992 fell by \$800,000, a reduction of 7.6 percent on 86 parcels. Because roll errors also are likely to continue, we are recommending that City management continue actions to verify City property roll accuracy and completeness, including monitoring valuation changes. The City Attorney should determine whether or not the

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City can pursue revenue lost from past years due to Assessor error. Management responses to recommendations are reproduced in Appendix D.

This audit was conducted in accordance with Generally Accepted Government Auditing Standards as they relate to expanded scope auditing and as required by Article III Scottsdale Revised Code (SRC) §2-117 *et. seq.* The audit was performed as outlined in Objectives, Scope and Method located in Appendix A.

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## BACKGROUND

The County Assessor is responsible for listing and valuing for tax purposes all county property, including the city's, and for maintaining the property roll. Property is listed and valued in parcels, a method of description which may not always be the same as a property address. Each parcel is assigned a unique identifier (the book/map/parcel number) as well as a tax area code which serves as an "address" for tax revenues. Valuation is assigned as secondary, which represents a portion of the property's full cash value, and as primary, which represents a portion of the property's "capped" or limited valuation.

Under the Arizona system, increases in the portion of the property tax levy which can be used to fund general government operations are capped at two percent a year, except for "escaped" property and certain other administrative provisions. Escaped property includes new construction, annexations, or missed improvements.

In 1989, all city parcels were physically canvassed and a number of possible errors in property classification, tax area coding and address were furnished to the Assessor for research. As a result, the City was credited with 19 parcel valuation corrections and 180 tax area code corrections. These corrections represented \$5.3 million full cash assessed valuation and an additional potential \$41,000 tax revenue a year. At the same time, three annexations were identified that needed to be completed by the Assessor. These parcels represented \$2 million full cash valuation, with an estimated \$10,000 annual tax revenue.

Depending upon Assessor parcel coding, tax area code corrections will not be considered escaped valuation and will be capped under the limited levy. Missed improvements and annexations should not be capped.

**TEAM PROJECT  
CREATED PARCEL  
DATABASE, WHICH  
SHOULD BE  
MAINTAINED**

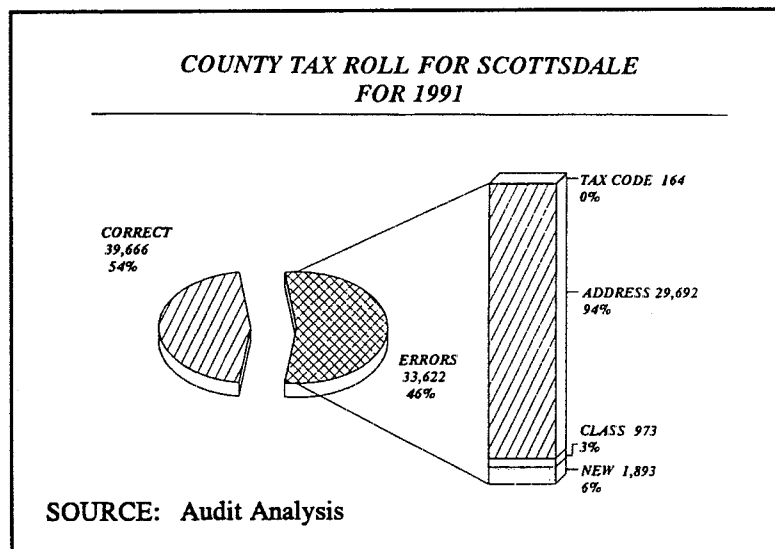
As a follow-on to the 1992 property tax management report, staff from Tax Audit, City Auditor, Development Services, and the Office of Management Systems (OMS) worked together to create a multipurpose parcel database. (A City organization chart is reproduced for reference in Appendix B.) Tax Audit agreed to lead the team effort in response to the audit report's recommendation that the property roll be annually verified. For our part, we agreed to develop the database, because we had verified, updated property rolls with which to work.

**Database Is Multipurpose**

The database, currently available on Mapper, the Citywide system, has many uses. Planning and Community Development staff can use the database. For example, GIS designers plan to use it as a source of information for GIS. One-Stop Shop staff plan to use it to automate quality control checks on building permit accuracy. Financial Services staff have several uses for the database. Accounting and Budget can use it to project revenues for budget plans and to assess the impact of special assessment districts. Utility Billing can use it to inquire about addresses. Tax Audit can use the database to verify the property tax revenue stream, as well as to identify commercial properties which should be licensed. In the future, all City departments may use it for address information, although at present about half the parcel addresses are missing from Assessor records.

**County Data Source Is  
Inadequately Controlled**

The database must be accurately maintained for it to benefit the City. Verifying information for the joint project confirmed that the Assessor roll continues to have errors. Approximately 46 percent of the City's 73,000 parcels have one or more description errors maintained on the Assessor roll. (See Insert.)



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Some errors arise due to incomplete annexations or to so-called "illegal" splits, developments whose planners have not applied to the City for plan review. Tax Audit staff has verified as correct about 1,900 parcel numbers which appeared on the 1991 tax roll which were not on the physically canvassed 1988 tax roll.

Other errors can arise because the Assessor does not have adequate controls over changes to the database. For example, a block of parcels was tax area coded to Wickenburg (tax area code 0900) which should have been coded to the City (0090). Changes are not provided to the City for review. According to Assessor staff, the error occurred when land was subdivided for development in 1986, and miscoded. In all, 164 parcels were sent for research to the Assessor's Office. Assessor staff reported that 103 parcels required correction. The Assessor's response is Appendix C.

Assessor confirmation and follow-up should be one step in the property roll verification process. We were initially unable to confirm the Assessor's analysis of valuation or numbers of parcels being corrected. While the Assessor reported that corrections were warranted on 103 parcels with \$16 million valuation, we asserted that 106 parcels with \$30 million valuation were due. The apparent discrepancy was due to tax exempt parcels, property valuation appeals, and annexation timing.

Another step in the property roll verification process should be to make sure that the Assessor's file is compatible with the City file. In testing the joint database, we identified a logic error which led to duplicate records, a situation which could occur again. The Assessor is in the midst of a two-year project to upgrade automation, causing changes in how automated files are designed. City management should designate a property tax database project focal point so that file changes can be planned.

Although the City will receive tax revenue because errors were corrected, the Chief Deputy Assessor indicated that the City cannot receive past revenue which has been lost due to Assessor errors, even though taxes may have been collected. According to the Chief Deputy Assessor, only property owners can request resolutions and three prior years tax corrections in the event of County clerical errors. We have referred this issue to the City Attorney for research.



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**Annual Verification Is  
Needed To Ensure Database  
Utility**

Tax Audit staff plan to annually verify the tax roll using the database, information on land splits or replats (redrawing a map), annexations or deannexations, and building permits. This information will be compared to the Assessor's final property roll, available in the late summer each year. This procedure should surface tax code errors, missing or misassigned parcels and classification errors. Historical property valuation and usage will be maintained for a five-year period for analysis. Eventually, Tax Audit staff could develop and analyze exception reports for valuation changes, determining the cause of a valuation drop or rise to enhance City budget projections.

To aid Tax Audit valuation monitoring, consideration could be given to estimating City building permit valuation using appraisal profession standards. Currently, SRC §31-32 *et. seq.* requires that Development Services use International Conference of Building Officials valuation data to estimate building permit values. These building valuation data do not take into account either the land value or the "highest and best use" factor important to property full cash value appraisal. According to the Director of Education of the International Association of Assessing Officers, building values can be lower or higher than the property's full cash value, depending upon factors such as location.

Although Tax Audit staff will monitor certain elements in the database, GIS staff potentially could enter erroneous information into the new system unless other control procedures are developed and used. For example, parcel addresses present a special problem because the Assessor does not yet attempt to track site addresses with any degree of accuracy. Tax Audit staff do not plan to verify address accuracy because addresses do not directly relate to City property tax revenue.

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**RECOMMENDATIONS**

1. The Financial Services General Manager should designate a City parcel database focal point responsible for making sure the database is adequately secured, maintained and updated.
2. The City Attorney should determine whether or not the City can take steps to recover revenue lost in past tax years due to County Assessor error.

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3. The Financial Services General Manager should continue to periodically verify that the city property tax roll is accurate and complete, that new construction has been valued and placed on the roll within statutory time limits, and that property valuation is updated yearly.
  4. The Development Services Director should determine whether or not City building permits can be valued using appraisal profession standards as a means of enhancing City property valuation monitoring.
  5. The Development Services Director should develop and implement procedures to accurately maintain Geographic Information System parcel data.
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**ABBREVIATED  
RESPONSES**

1. Financial Services General Manager agrees - this recommendation has "...been assigned to the Tax Audit Division..."
2. City Attorney concurs - "Our office has reviewed this suggestion and...that this is a necessary step in assisting in the potential recovery of lost revenue to the City."
3. Financial Services General Manager agrees - this recommendation has "...been assigned to the Tax Audit Division and they have made the initial computer reconciliations with the help of the City Auditor's office."
4. Development Services Director agrees - "...that we can look into the pro's and con's of assigning an appraised value to building permits rather than construction valuation (labor/materials) which is our present practice."
5. Development Services Director agrees - "We have developed procedures to maintain parcel data in the map conversion process and are developing procedures for operational maintenance of this data within the Records Unit."


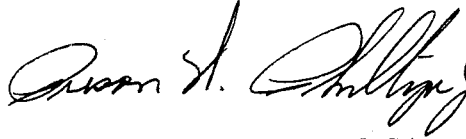
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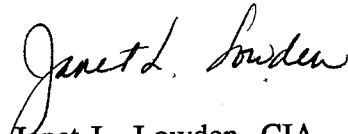
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Respectfully Submitted,

Approved by,



Preson W. Phillips, Jr., CISA      Michael L. Ashcraft, CIA/CFE



Janet L. Lowden, CIA

PP/JL/MLA:Alexandra Varela

**Appendix A**  
**Objectives, Scope and**  
**Method**

This report documents results of a joint project to create a database of city property parcels. City Auditor staff worked with staff from Tax Audit, Development Services, and OMS to develop a verified database which could serve a number of users. The report follows on a recently issued report, "Progress Since 1989 In Property Tax Management" (8902.1 and 9002, October 1992), and reports results of an in-office reverification of the city property roll. As well, this audit is the first product of a scheduled project approved by City Council in the City Auditor's 1992 audit program (9010C, Geographic Information System).

Audit scope included changes to the city property roll maintained by the County Assessor from 1988 through 1991. Audit work was conducted in accordance with Generally Accepted Government Auditing Standards as they relate to expanded scope auditing in a local government environment and as required by Article III SRC §2-117 *et. seq.*

To determine whether the 1991 city property roll was accurate, the 1988 tax roll was first compared to the 1990 tax roll. The 1988 roll had been verified through site visits to each parcel (canvassing), and exceptions had been furnished to the County Assessor for research and warranted corrections. The results of the first comparison were compared to the 1991 tax roll, and possible exceptions were marked.

Comparison was automated in the following manner. A file was created on Mapper from the County Assessor's 1991 tax roll for Scottsdale book numbers, by book. From this file, a total number of parcels was derived. Parcels within each book which were known to not belong to the city on the basis of prior audit work and from knowledge of relevant coding were deleted from this file.

Within each book, totals by map were compared from year to year. For maps where total parcel count matched across the tax years compared, no further research was performed. For maps and books where a variance was found in parcel number between one year's map total and a subsequent map total, parcels were listed and researched. Variances were checked against the exceptions researched by Assessor staff for the 1989 audit. Tax Audit staff then matched new parcels or missing parcels to Development Services automated records of parcel splits and

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**CITY PARCEL DATABASE**  
**Appendix A: Objectives, Scope and Method**

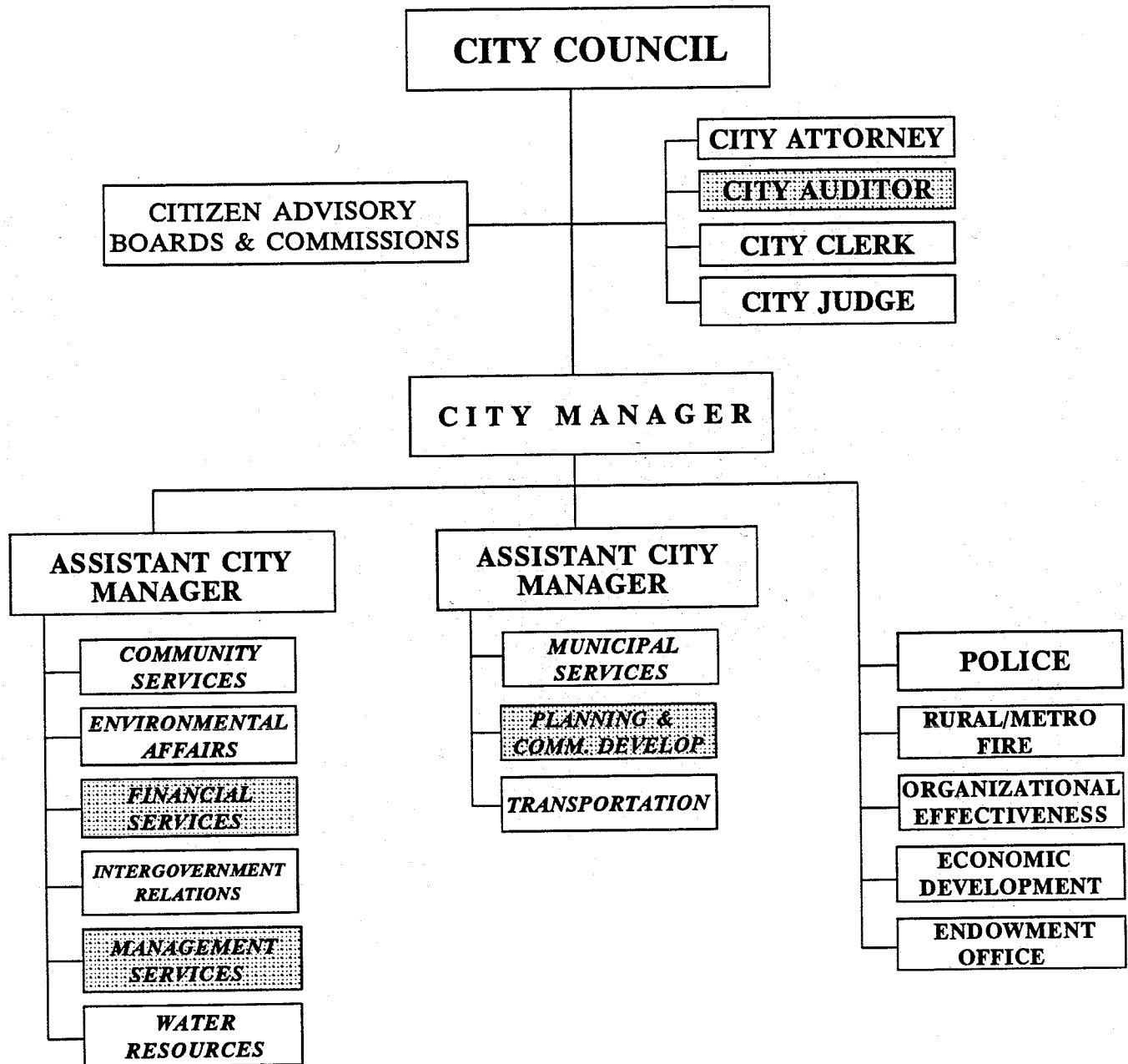
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replats, subdivision files, and to annexations. Finally, the Assessor was requested to determine whether or not discrepancies should be corrected and the cause of the error. This database will be used by audit as a baseline for the validation of GIS conversion data. Further modification of this file could result.

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CITY PARCEL DATABASE  
Appendix B: Database Project Participants

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Note: Highlighted areas indicate project participants  
Source: City Clerk and Audit Analysis

CITY PARCEL DATABASE  
Appendix C: Assessor Response

NOTE: Assessor parcel research results reproduced here were documented informally by annotating a City parcel list.

9-4-92

RESULTS OF RESEARCH OF PARCELS IN JANET LOWDEN'S LIST OF 8-25-92.

130-09-024A, -025A: TAC SHOULD BE CHANGED TO 4890.  
UNIDENTIFIED CLERICAL ERROR IN 1988 SPLIT.

173-20-044 \* 125: TAC OK AT 4890.  
CONTAINS 40 PARCELS. THIS IS THE CASA BLANCA. THIS SUBDIVISION WAS ALSO LISTED IN THE 1988 SCOTTSDALE AUDIT. IT WAS ANNEXED IN 1979, AND SCOTTSDALE STILL SAYS IT IS NOT IN SCOTTSDALE.

173-34-020: TAC SHOULD BE CHANGED TO 4890.  
UNIDENTIFIED CLERICAL ERROR.

174-16-012A: TAC OK AT 4890 FOR '92 ASSESSMENT ROLL.  
THIS WAS A 1991 ANNEXATION, COMPLETED LATE DUE TO ORDINANCE RECEIVED 2-24-92, AFTER PHONE CALL TO CITY. WE PLAN ON DOING A '91 RESOLUTION FOR THIS ANNEXATION.

174-29-041A,B; -094A; -099B: TAC SHOULD BE CHANGED TO 4890  
UNIDENTIFIED CLERICAL ERROR IN 1981 SPLIT. ERROR IN -099B CARRIED FORWARD FROM PARENT PARCEL.

176-14-101, 176-15-027A: TAC OK AT 9899.  
THESE PARCELS ANNEXED IN 1986; -027A WAS LISTED IN THE 1988 AUDIT. SCOTTSDALE STILL BELIEVES THIS TO BE IN COUNTY.

211-42-048: TAC OK AT 9390.  
ANNEXED BY SCOTTSDALE IN 1983.

211-61-021D \* -023: TAC OK AT 9300.  
CONTAINS 8 PARCELS. THESE PARCELS WERE LISTED IN THE 1988 AUDIT.

215-07-029, -030: TAC SHOULD BE CHANGED TO 6990.  
THESE PARCELS ARE EXEMPT AND REPRESENT NO GAIN TO SCOTTSDALE.

215-48-003F: TAC SHOULD BE CHANGED TO 6990.  
ALSO EXEMPT.

215-51-007R: TAC SHOULD BE CHANGED TO 6990.  
ALSO EXEMPT.

216-34-002B: TAC SHOULD BE CHANGED TO 9390.  
CLERICAL ERROR IN 1984 ANNEXATION.

216-68-025A,B: TAC OK AT 9300.  
THESE PARCELS WERE ALSO IN THE 1988 AUDIT. THEY STILL ARE NOT IN SCOTTSDALE.

216-74-007C,D: TAC SHOULD BE CHANGED TO 9390.  
UNIDENTIFIED ERROR IN 1984 SPLIT.

217-02-145 \* 515, 217-06-086 \* 103: TAC SHOULD BE CHANGED TO 0090.  
CONTAINS 81 PARCELS. ERROR IN 1986 SUB SET-UPS. PARCELS 217-02-493 \* 515 IN SECOND AMENDMENT, TAC ERROR FROM PARENT PARCELS. (NOTE: PARCEL RANGE REFERS TO PARCELS LISTED BY SCOTTSDALE.)

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**CITY PARCEL DATABASE**  
**Appendix C: Assessor Response**

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219-13-005A, 006, 007(B): TAC OK AT 9390 FOR 1993 ROLL.  
ANNEXATION WAS NOT POSTED UNTIL 1993 DUE TO ERROR IN LEGAL  
DESCRIPTION IN ORDINANCE #2052, AND PER DEPT. OF REVENUE.  
ORIGINAL NOTICE TO SCOTTSDALE RE: ERROR IN LEGAL 6-18-90.

219-39-010G \* V: TAC OK AT 0090 FOR 92.  
CONTAINS 7 PARCELS. 1991 ANNEXATION WAS POSTED LATE DUE TO DEPT.  
OF REVENUE LETTER RECEIVED LATE. WE PLAN ON DOING A '91  
RESOLUTION FOR THIS ANNEXATION.

219-57-001 \* 005: TAC OK AT 9300.  
CONTAINS 5 PARCELS. NEVER ANNEXED BY SCOTTSDALE.

**SUMMARY:**

NUMBER OF PARCELS REPORTED: 164  
NUMBER OF PARCELS IN ERROR: 103 ('91 ROLL)  
95 ('92+ ROLL)

FULL CASH VALUE ADDED FOR 92: \$11,397,264  
FULL CASH VALUE ADDED FOR 91: \$16,182,055



CITY PARCEL DATABASE  
Appendix D: Management Responses

M E M O R A N D U M

DATE: November 25, 1992  
TO: Michael Ashcraft  
City Auditor  
FROM: Richard Garnett, III *Richard Garnett*  
City Attorney  
RE: City Auditor Report No. 8902.1A:  
City Parcel Database

Recommendations to City Management in the above named report include one recommendation (No. 2) for the City Attorney to determine whether or not the City can take steps to recover revenue lost in past tax years due to County Assessor error.

Our office has reviewed this suggestion and concurs that this is a necessary step in assisting in the potential recovery of lost revenue to the City. Our plan to implement this request is as follows:

1. Research the law to determine whether the City has any legal means of recovering the lost revenue due to errors by the County Assessor and to determine which persons or entities may have liability to the City in this regard.
2. Meet with the City Auditor's office to discuss the results of our research. If our research concludes that the City does have a cause of action, we will then discuss with them what information and evidence will be needed to support a claim by the City.

Our office anticipates being in a position to provide an answer to the legal question posed by the City Auditor's office and to meet with them by December 22, 1992.


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**CITY PARCEL DATABASE**  
**Appendix D: Management Responses**

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December 14, 1992

TO: Michael Ashcraft, City Auditor

FROM: Jon Chase, Development Services Director 

**PARCEL DATABASE REPORT**

Mike, I have reviewed the draft report for the above topic and this memo is offered in response to the issues you raise for my review and comment. I want to thank you for the time you and your staff spent with me on Monday going over the larger issues surrounding this report.

Recommendation #1: The Financial Services General Manager should designate a City parcel database focal point responsible for making sure the database is adequately secured, maintained, and updated.

Recommendation #1/Response: I believe that we decided that this issue should speak to the property tax database, and we did agree that this item is related to Recommendation #5 on map graphics. The point here is that you are speaking to a need for Financial Services to secure, maintain, and update property tax data, and #5 relates to map (graphic) changes for parcel boundaries and attendant parcel data.

Recommendation #4: The Development Services Director should determine whether or not City building permits can be valued using appraisal profession standards as a means of enhancing City property valuation monitoring.

Recommendation #4/Response: I agree that we can look into the pro's and con's of assigning an appraised value to building permits rather than construction valuation (labor/materials) which is our present practice. I understand from our conversation that the County Assessor does not always use our construction valuation information for arriving at an assessed valuation. We will look into this by the end of July 1993.

Recommendation #5: The Development Services Director should develop and implement procedures to accurately maintain Geographic Information System parcel data.

Recommendation #5/Response: I agree. We have developed procedures to maintain parcel data in the map conversion process and are developing procedures for operational maintenance of this data within the Records Unit.

To address parcel data changes made directly through the County the Financial Services report plans on submitting a decision package for 92/93 to monitor parcel changes at County Recorder and Assessors offices. The changes will be given to the Records Unit for posting on our city map.

Observation: This report speaks to the need for sharing data so that operational maintenance may take place on the parcel database. This will require a communications system that is presently being planned by the Office of Management Systems.

JC/mw

c: William B. King  
John Faramelli  
Don Logan  
04-6

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**CITY PARCEL DATABASE**  
**Appendix D: Management Responses**

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December 21, 1992

TO: Michael Ashcraft, City Auditor  
FROM: James A. Jenkins, Financial Services General Manager

Response to Report No. 8902.1A, City Parcel Database.

As requested, I am responding to recommendations #1 and #3 which reads:

1. The Financial Services General Manager should designate a City parcel database focal point responsible for making sure the database is adequately secured, maintained and updated.
3. The Financial Services General Manager should continue to periodically verify that the city property tax roll is accurate and complete, that new construction has been valued and placed on the roll within statutory time limits, and that property valuation is updated yearly.

I agree with these recommendations. These two recommendations have been assigned to the Tax Audit division and they have made the initial computer reconciliations with the help of the City Auditor's office. The updated County tax rolls will be compared to the current year's rolls each year by the Tax Audit division.

Any further questions on the follow up to these recommendations can be directed to Monroe Warren, Tax Audit Director at 994-2447.

c: Dick Bowers, City Manager  
Barbara Burns, Assistant City Manager